the specification of which

DECLARATION FOR PATENT APPLICATION

As a below-named inventor, We hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

THERMAL BUBBLE MEMBRANE MICROFLUIDIC ACTUATOR

was filed on

as

X is attached hereto.

	• •	ation Serial Nos amended onsicable)			
-		ed and understand the conte amended by any amendments			fied
		information which is material 37, Code of Federal Regulation			
application(s) foreign applicat	or patent or inventor's	ts under Title 35, United States certificate listed below and han nventor's certificate having a fed:	ve also identi	fied below	any
Prior Foreign Application(s)		Priority Claimed			
Number	Country	Day/Month/Year	(Yes)	(No)	_
Number	Country	Day/Month/Year	(Yes)	(No)	
Number	Country	Day/Month/Year	(Yes)	(No)	

I hereby claim the benefit under Title 35, United States Code, [120] of any United States
application(s) listed below and, insofar as the subject matter of each of the claims of this
application is not disclosed in the prior United States application in the manner provided by the
first paragraph of Title 35, 1112, I acknowledge the duty to disclose material information as
defined in Title 37, Code of Federal Regulations, \$\square\$1.56(a) which occurred between the filing
date of the prior application and the national or PCT international filing date of this application:

Application Serial No.	Filing Date	Status		
I hereby claim the benefit application(s) listed below.	under 35 U.S.C. □119(e) of any United States provisional		

I further declare that I do not know and do not believe that the invention claimed in this application was ever known or used by others in this country before my invention thereof, or patented or described in any printed publication in any country before my invention thereof, or more than one year prior to this application or any prior U.S. application above identified in which said invention may have been disclosed, or in public use or on sale in the United States of America for more than one year prior to this application or any prior U.S. application above identified in which said invention may have been disclosed.

POWER OF ATTORNEY

And I hereby appoint as my attorneys with full power of substitution to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith to the firm of TUNG & ASSOCIATES, including the following individual attorneys associated with the firm:

Individual AttorneyReg. NRandy W. Tung31.311

Please send all correspondence concerning this application to the following address:

TUNG & ASSOCIATES 838 W. Long Lake Road, Suite 120

> Bloomfield Hills, Michigan 48302 Phone: (248) 540-4040 Fax: (248) 540-4035

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application and of any patent issued thereon.

Full name of first joint inventor	CHEN-KUEI CHUNG First Middle Last		
Inventor's Signature	CHEN-KUEI CHUNG		
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Full name of second joint inventor	Sway Chuang First Middle Last		
Inventor's Signature	Sway chuang		
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Full name of third joint inventor	CHUNG-CHU CHEN
	First Middle Last
Inventor's Signature	Chung-Chu Given
Date	04/>4/>63
Residence	11F 428, Wu Chen South Road, South Section Torichur
Citizenship	Taiwan, Republic of China
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□1.56 Duty to disclose information material to patentability

- (a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by 壯 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:
- (1) prior art cited in search reports of a foreign patent office in a counterpart application; and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.
- (b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and
- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
 - (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

- (c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:
 - (1) Each inventor named in the application;
 - (2) Each attorney or agent who prepares or prosecutes the application; and
- (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.
- (d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent or inventor.

(35 U.S.C. 6, Pub. L. 97-247)

[42 FR 5593. Jan. 28, 1977, as amended at 47 FR 21751, May 19, 1982; 48 FR 2710, Jan. 20, 1983; 49 FR 554, Jan. 4, 1984; 50 FR 5171, Feb. 6, 1985; 53 FR 47808, Nov. 28, 1988, effective

Jan. 1, 1989; 57 FR 2034, January 17, 1992, effective March 6, 1992]